






HYDROPHOBICALLY COATED PRESSURE SENSOR**Patent number:** WO03054499**Publication date:** 2003-07-03**Inventor:** HEGNER FRANK (DE); DREWES ULFERT (DE);
ROSSBERG ANDREAS (DE); SCHMIDT ELKE (DE)**Applicant:** ENDRESS & HAUSER GMBH & CO KG (DE); HEGNER
FRANK (DE); DREWES ULFERT (DE); ROSSBERG
ANDREAS (DE); SCHMIDT ELKE (DE)**Classification:****- international:** G01L9/00; G01L7/00; G01L19/06**- european:****Application number:** WO2002EP14443 20021218**Priority number(s):** DE20011063567 20011221**Also published as:**

 EP1456619 (A1)
 US6941814 (B2)
 US2005103109 (A)
 DE10163567 (A1)
 AU2002361155 (A)

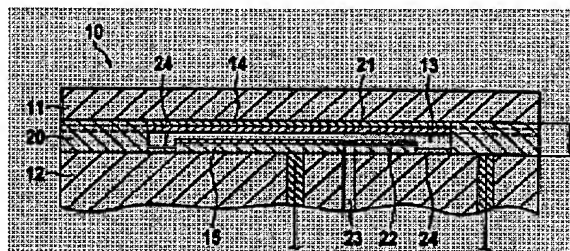
Cited documents:

 EP1061351
 US5318928
 US4996082
 US5261960
 EP0262323
 more >>

Report a data error he**Abstract of WO03054499**

The invention relates to a pressure sensor for measuring a measuring pressure. The inventive pressure sensor comprises a pressure compartment and a deformation body that can be impinged upon with a medium that is subject to the measuring pressure and that at least partially delimits the pressure compartment and closes the latter from the medium in a pressure-sealed manner. The walls of the sensor compartment comprise a hydrophobic coating that is applied by chemical vapor deposition. The hydrophobic coating preferably comprises silanes, especially silanes having one or more hydrophobic groups R and one or more anchoring groups X.

Particularly preferred are the groups R-Si-X₃, R₁R₂-Si-X₂, R₁R₂R₃-Si-X. The hydrophobic group is preferably an alkyl, perfluoroalkyl, phenyl or perfluorophenyl group. The anchoring group X is preferably OH (silanol), -X (halogenide, e.g. Cl), -OR (ester, e.g. OCH₃), -NH₂ (amine) or SH (mercaptosilane). Aliphatic or cyclic silazanes Si-NH-Si, e.g. hexamethyldisilazane, can also be used. Compounds of the Ry-Me-XZ with Me = e.g. Zr, Ti, can also be used.



Data supplied from the esp@cenet database - Worldwide